



JP2000154774



INVESTOR IN PEOPLE

PN - JP2000154774 A 20000606

PD - 2000-06-06

PR - JP19980368441 19981117

OPD - 1998-11-17

TI - (A)

WAVE FORCE ENERGY CONVERTING DEVICE

AB - (A)

PROBLEM TO BE SOLVED: To improve conversion efficiency of wave force energy by providing a flat plate floating body with an auxiliary floating body whose natural frequency can be adjusted, resonating this floating body by making an oscillating motion natural frequency of front and rear directions of the floating body coincide with the frequency of waves and driving pumps at both the ends of a link member by motion of the floating body. SOLUTION: At the center of a base part 10 provided on an upper surface of a tank 1 in which a lower end of a leg part 11 is fixed to a sea-bottom 9 and a length of a depth of water or more is provided, a pump 7 in which a shaft 70 for pivotally attaching a link member 2 to the base part 10 is made as a center shaft is installed. A free end of the link member 2 is constituted as a housing of a second pump 8 and a floating body 3 is pivotally attached to a center shaft 80 of this pump 8. This floating body 3 is constituted of an auxiliary floating body 5 springing out from the surface of the sea and sinking into the sea according to oscillation due to wave motion and a flat plate floating body 4 to be fixed to this auxiliary floating body 5 by separating the flat plate floating body 4 by a prescribed distance satisfying a resonance condition with the auxiliary floating body 5 via a connecting plate 6, and the pumps 7, 8 are driven by oscillating motion of this floating body 3.

IN - (A)

WATABE TOMIJI

PA - (A)

WATABE TOMIJI

IC - (A B2)

F03B13/18

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TI - Tidal power converter for use in agricultural facility, has floating body attached with weight to oscillate in water to generate every for driving pump

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PN - JP3218462B2 B2 20011015 DW200167 F03B13/18 009pp

- JP2000154774 A 20000606 DW200038 F03B13/18 009pp

PA - (WATA-I) WATABE T

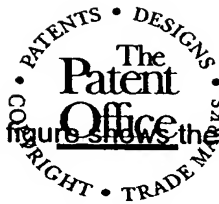
IC - F03B13/18

AB - JP2000154774 NOVELTY - A floating body (3) is fitted to a shaft (80) which is fixed by a link (2) at one end, above sea level. The floating body has a flat floating body (4) provided with weight (42) and an auxiliary floating body (5) whose bobbing supplies potential energy to a pump (7) and whose oscillatory motion is converted into kinetic energy to drive another pump (8) provided beside the floating body.

- DETAILED DESCRIPTION - The other end of link is fixed to a shaft (70) which is mounted on a base (10) fixed on sea floor surface or coast.

- USE - The tidal power converter is used for generation of electricity at coastal area for sea water desalination apparatus, agricultural facilities.

- ADVANTAGE - The tidal power converter is useful for generation of electricity of small capacity at the remote, depopulated coastal area, at a delinked island, as the installation is simple and economical, thus the cost per KW power generation is very economical.



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DESCRIPTION OF DRAWING(S) - The figure shows the pictorial drawing of wave power energy converter installed on sea surface.

- Link 2
- Floating body 3
- Flat floating body 4
- Auxiliary floating body 5
- Pumps 7,8
- Base 10
- Shafts 70,80
- (Dwg.2/13)

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